People at Risk: Those with Weakened Immune Systems

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A properly functioning immune system works to clear infection and other foreign agents from the body. People with health problems or who take medicines that weaken the body's ability to fight germs and sickness are more likely to get a foodborne illness. This includes, for example, people with diabetes; liver or kidney disease; HIV/AIDS; autoimmune diseases; organ transplants; and people receiving chemotherapy or radiation therapy.

People with weakened immune systems are more likely to have a lengthier illness, undergo hospitalization, or even die, should they get a foodborne illness. To avoid this, you must be especially careful when choosing, handling, preparing, and consuming food.

Choose Safer Food

Learn about safer food choices for people with a higher risk for foodborne illness, including people with weakened immune systems.

If you have health problems or take medicines that weaken your immune systems, or prepare food for someone who does, you should always follow the four steps below to reduce your chance of developing

a foodborne illness:

Clean: Wash hands, utensils and surfaces often. Germs can spread and survive in many places.

Separate: Raw meat, poultry, seafood, and eggs can spread illness-causing bacteria to ready-to-eat foods, so keep them separate.

Cook: Food is safely cooked only when the internal temperature is high enough to kill germs that can make you sick.

Chill: Refrigerate promptly. Bacteria that cause food poisoning multiply quickest between 40°F and 140°F.

People with Cancer

People with cancer are more likely to get a foodborne illness because of their weakened immune systems. Cancer treatments and the disease process of cancer make you more susceptible to many types of infections.

People with Diabetes

Diabetes affects various organs and systems of the body, causing them not to function properly, and making infection more likely. The immune system may not immediately recognize harmful germs, which increases the risk of infection.

Glucose Levels: High glucose levels suppress the function of white blood cells that fight off infection, increasing the risk of contracting a foodborne illness. A foodborne illness may affect blood glucose levels because the illness impacts what and how much can be eaten.

Gastrointestinal Tract (GI): Diabetes may cause the stomach to produce low amounts of digestive acid. In addition, nerves may not move food through the GI tract as quickly. When the stomach holds on to food longer than necessary, bacteria start to multiply. If the amount of unhealthy bacteria in the stomach gets too high, it can lead to foodborne illness.

Kidneys: Kidneys usually work to cleanse the body. If diabetes affects how the kidneys function, they may hold on to harmful germs.

People with HIV/AIDS

The HIV virus damages or destroys the immune system, making people with it more likely to contract many types of infections, including those that cause foodborne illness.

Transplant Recipients

Organ rejection by the immune system, the body’s natural reaction to “foreign invasion,” is a serious

problem for transplant recipients. Transplant recipients take drugs to suppress the immune system to keep it from attacking, or rejecting, the transplanted organ or bone marrow. These medicines are necessary, but a side effect is that they make infections more likely, such as those caused by foodborne germs.

People with Autoimmune Diseases

People with autoimmune disease are more likely to get a foodborne illness because their immune systems can't fight infection effectively. Common types of autoimmune diseases include multiple sclerosis (MS), inflammatory bowel disease (IBD), and lupus (SLE).

Additional Resources

Food Safety for People with Diabetes (FDA)

Food Safety for People with Cancer (FDA)

Food Safety for People with HIV/AIDS (FDA)

Food Safety for Transplant Recipients (FDA)

Listeria-People with Weakened Immune Systems (CDC)

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